IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: FOWLKES, et al.

From-BROWDY NEIMARK

Serial No.: 09/050,359

Filed: March 31, 1998

For: IDENTIFICATION OF DRUGS

USING COMPLEMENTARY

COMBINATORY LIBRARIES

Art Unit: 1639

Examiner: PONNALURI,

Washington, D.C.

December 4, 2002

Docket No.: FOWLKES=4B

Confirmation No.: 6741

ELECTION WITH TRAVERSE

Commissioner of Patents Washington, D.C. 20231

sir:

- In response to the restriction requirement mailed 1. October 18, 2002, Applicants elect group I (claims 27-29, 22, 25-26, 30 and 38, as amended on even date herewith) with traverse.
- Both groups are directed to structured panels consisting of a plurality of biased combinatorial linear peptide libraries. The groups differ in that, for the panels of group I, in each library there is a single constant residue, and the position of that residue is the same for all libraries of the panels, whereas for the panels of group II, in each library there are two constant residues, one of which is at a position fixed for the entire panel, the other "scanning" the remaining positions.

It will be appreciated that the sequence set presented by both panels can be the same, e.g., X_{11} where X is any of the 20 genetically encoded amino acids, the difference lying in how that diversity is distributed across the libraries of the panels.

These inventions, even if distinct, are plainly related, and hence in order to insist on restriction the Examiner must show that simultaneous examination would be a serious burden.

Constant relative to a single library, but variable relative to the panel as a whole.

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MPEP §§803(B) and 808.02.

The Examiner concedes that the groups are classified in the same class/subclass. Hence \$808.02(A) does not apply. Examiner justifies the restriction as follows:

> Even though the groups are classified in the same class/subclass, this has no effect on the non-patent literature search. Different groups would require completely different searches in non-patent databases, and there is no exception that the searches would be co-extensive. Therefore, these do not [???] create an undo [undue] search burden, and restriction for examination purposes as indicated as [is] proper.

While MPEP \$808.02(c) allows restriction of inventions requiring a "different field of search", we do not agree that the searches would be "completely different", or even significantly different.

In conducting computer database searching, one must take care not to use keywords in such a way as to inadwertently exclude relevant documents. That is particularly true conducting a patentability search, where it is better for a search to report some irrelevant documents than to miss relevant We are not aware of any safe way to search specifically for the elected invention, group I, while excluding group II. Moreover, we think that the effort required to search the nonpatent literature for both groups I and II is essentially the same as that needed to search group I alone.

As further evidence that searching both groups does not impose a serious burden, we point out that (1) claims to both inventions have been presented since this case was filed (original claim 21 covered both I and II; claim 22 was specific to I, claim 23 was specific to II); (2) the June 28, 1999 restriction grouped claims 21-23 together; (3) the Examiner searched both groups in the course of preparing the November 29,

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1999 action; and (4) both groups were again examined in the office actions of March 5, 2001, September 21, 2001, and February 19, 2002. For the PTO to group inventions I and II together in 1999, search them both, examined them both repeatedly and then, after three years, suddenly announce that it cannot search and examine them together anymore seems to be a gross departure from accepted restriction practice, and entirely illogical and unreasonable.

3. In response to the species restriction stated in OA \$10, Applicants elect, with traverse, that the peptides are 11 amino acids long (not counting any SS or SR linkers), and that the fixed position is 6 if SS and SR linkers are so disregarded. Applicant traverses this restriction on the ground that generic claims are allowable.

If the Examiner is also seeking an election of a single unique amino acid sequence, we traverse on the ground that the invention relates to panels of libraries, not to individual peptides. The sequence of interest will depend on the target and, even for a single target, there can be many binding peptides.

Nonetheless, to avoid the possibility that our response is deemed incomplete, we elect with traverse the 11-mer MDM2-binding peptide PFGDYWEELLN (SEQ ID NO:43) on page 94, line 7.

- 4. OA \$11 calls for election of a "single value of "m", single value for "n", and a one or two specific fixed position amino acid or amino acids) in each library". In response, we elect m=5, n=5, and one fixed position AA per library (ignoring SR or SS linkers).
- 5. It has come to our attention that the claim language "each library having one and only constant residue position" might be misinterpreted.

Applicants contemplate that, to improve the presentation of the peptides, they may include constant (for the whole panel) N-

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or C-terminal "linkers". Thus, in the group I libraries of P71, L28-36, the peptide was said to be X₅UX₅, but the DNA for each GACTGTGCCTCGAGK (NNK) 5XXX (NNK) 5TCTAGACGTGTCAGT-3' encodes N- and C-terminal linkers.

SS and SR linkers are explicitly stated at P96, L38-P97, L14, and again on P110, P111, P112, and P134-136. Other linker moieties (such as GG, GSG, SGS) are suggested at P52, L30-38. Hence, on even date herewith, we are amending the claims to more clearly cover peptides with linkers.

Applicant's election of group I is intended to be an election of the subject matter of claim 27 as now amended, i.e., an election of panels in which there is one fixed residue position which is (1) constant in each library, and (2) variable in the panel as a whole.

It is believed that new claims 39-42 belong to group I, new claims 43-45 belong to group II, and new claim 46 is a linking claim that can be joined with either group.

Respectfully submitted,

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